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# CREATING A CONVERSATIONAL CHAT BOT OF A SPECIFIC PERSON

#### BACKGROUND

A chat robot (chat bot) is a conversational computer program that simulates human conversation using textual and/or auditory input channels. Typically, chat bots are implemented in dialogue systems and natural language processing systems to perform various practical tasks (e.g., customer support, information acquisition, etc.). In such implementations, chat bots are trained using data conversational dialogue samples from various users and user sessions. As such, the chat bots in these implementations represent a generic, normalized version of the personalities and attributes of the entire sampled user base.

It is with respect to these and other general considerations that the aspects disclosed herein have been made. Also, although relatively specific problems may be discussed, it 20 should be understood that the examples should not be limited to solving the specific problems identified in the background or elsewhere in this disclosure.

#### **SUMMARY**

Examples of the present disclosure describe systems and methods of creating a conversational chat bot of a specific person (or specific entity). In aspects, social data (e.g., images, voice data, social media posts, electronic messages, 30 written letters, etc.) relating to the specific person may be accessed. The social data may be used to create or modify a special index in the theme of the specific person's personality. The special index may be used to train a chat bot to converse and interact in the personality of the specific 35 person. During such conversations, one or more conversational data stores and/or APIs may be used to reply to user dialogue and/or questions for which the social data does not provide data. In some aspects, a voice font of the specific person may be generated using recordings and sound data 40 related to the specific person. In some aspects, a 2D or 3D model of the specific person may be generated using images, depth information, and/or video data associated with the specific person.

This Summary is provided to introduce a selection of 45 concepts in a simplified form that are further described below in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter. Additional aspects, 50 features, and/or advantages of examples will be set forth in part in the description which follows and, in part, will be apparent from the description, or may be learned by practice of the disclosure.

## BRIEF DESCRIPTION OF THE DRAWINGS

Non-limiting and non-exhaustive examples are described with reference to the following figures.

FIG. 1 illustrates an overview of an example system for 60 creating a conversational chat bot of a specific person as described herein.

FIG. 2 illustrates an example input processing unit for creating a conversational chat bot of a specific person as described herein.

FIG. 3 illustrates an example method of creating a conversational chat bot of a specific person as described herein

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FIG. 4 is a block diagram illustrating example physical components of a computing device with which aspects of the disclosure may be practiced.

FIGS. **5**A and **5**B are simplified block diagrams of a mobile computing device with which aspects of the present disclosure may be practiced.

FIG. 6 is a simplified block diagram of a distributed computing system in which aspects of the present disclosure may be practiced.

FIG. 7 illustrates a tablet computing device for executing one or more aspects of the present disclosure.

### DETAILED DESCRIPTION

Various aspects of the disclosure are described more fully below with reference to the accompanying drawings, which form a part hereof, and which show specific exemplary aspects. However, different aspects of the disclosure may be implemented in many different forms and should not be construed as limited to the aspects set forth herein; rather, these aspects are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the aspects to those skilled in the art. Aspects may be practiced as methods, systems or devices. Accordingly, aspects may take the form of a hardware implementation, an entirely software implementation or an implementation combining software and hardware aspects. The following detailed description is, therefore, not to be taken in a limiting

The present disclosure provides systems and methods of creating a conversational chat bot of a specific person (or specific entity). In aspects, social data relating to the specific person may be accessed. In examples, the specific person may correspond to a past or present entity (or a version thereof), such as a friend, a relative, an acquaintance, a celebrity, a fictional character, a historical figure, a random entity, etc. The specific person may also correspond to oneself (e.g., the user creating/training the chat bot), or a version of oneself (e.g., oneself at a particular age or stage of life). Social data, as used herein, may refer to images, image data, voice data, emails, text messages, dialogue data/commands, social media posts, written letters, user profile information, behavioral data, transactional data, geolocation data, and other forms of data about a specific person. In examples, social data may be stored by, and/or collected from, various data sources. The social data (or portions thereof) may be used to create or modify a personalized chat index in the theme of the specific person's personality. A chat index, as used herein, may refer to a repository of conversational data. In examples, creating/ modifying the personalized chat index may comprise applying one or more rule sets or machine learning to the social data of a specific person.

In aspects, a personalized chat index may be used to train
55 a chat bot or language understanding (LU) model to converse and/or interact in the personality of the specific person.

A model, as used herein, may refer to a predictive or statistical language model that may be used to determine a probability distribution over one or more word, character
60 sequences or events, and/or to predict a response value from one or more predictors. In examples, a model may be a rule-based model, a machine-learning regressor, a machine-learning classifier, a neural network, or the like. In some aspects, conversing in the personality of a specific person
65 may include determining and/or using conversational attributes of the specific person, such as style, diction, tone, voice, intent, sentence/dialogue length and complexity,